

City's Management Of Contract Amendments And Change Orders Needs Improvement

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EXECUTIVE SUMMARY

Between 1997 and 2002, the City of Seattle expects to spend almost \$1.9 billion on capital improvement projects to repair, improve and expand City-owned facilities. Architectural and engineering (A&E) consultant contracts and construction service contracts will account for most of these expenditures, with consultant contract amendments and construction contract change orders continuing to represent a significant proportion of these expenditures. Currently, expenditures for A&E contract amendments generally exceed the original contract values, and change orders for construction contracts generally range between 10-25% of the original contract values.

Because of the monetary significance of contract amendments and change orders, we initiated this review to evaluate the Citywide and department-specific practices at Seattle City Light, Seattle Public Utilities, and the Department of Parks and Recreation¹ for issuing and controlling the costs of contract amendments and change orders. In particular, we sought to determine whether these departments

- adhered to relevant City and State laws and regulations; and,
- used appropriate contract controls and procedures to safeguard City resources.

Results of Our Work

City departments need to improve their management of A&E consultant contract amendments to ensure that the amounts the City pays for these services are fair and reasonable. Specifically, City departments need to:

- define scope of services and estimate costs prior to requesting consultant's proposed price;
- document evaluations of consultant proposals and contract negotiations;
- review support for proposed direct and indirect rates;
- negotiate fixed fees and document rationale;
- review invoices against contract terms and conditions;
- prevent the mislabeling of non-engineering work as engineering work; and
- use competitive selection rather than contract amendment for new design services.

In addition, the City needs to provide more oversight and better coordination of departmental efforts to control A&E consultant contract compensation. The City's General Rules for Consultant Contracting presently provides little guidance on setting

¹ We chose to include the two utilities for this study because they represent almost two-thirds of current and anticipated spending for capital improvements. We added Parks to the study to include one general fund department. Together, the three departments represent almost three-quarters of current and anticipated spending for capital improvement contracts.

contract compensation and controlling contract costs. Also, departments do not have a means of coordinating information on contractor rates.

Significant weaknesses also exist in the City's administering of change orders for construction contracts:

- departments often inadequately document the pricing of change orders, particularly larger ones.
- the lack of any Citywide definition of contractor overhead increases the likelihood of overpayment;
- the lack of formal Pre-award Surveys to eliminate unqualified contractors from the competitive selection process makes cost control over change orders more difficult; and,
- departments are issuing change orders for work unrelated to the original contracts, generally because the City has not yet established a small works roster of construction firms.

Executive Action Plan

The Executive generally concurs in our findings and recommendations. The Executive Services Department, in conjunction with contracting departments and the Law Department, will revise the General Rules for Consultant Contracting to direct City departments in implementing these recommendations. With assistance from the Executive Services Department, contracting departments will provide training on the improved contract-management procedures to their project managers. Both the contracting departments and the Executive Services Departments will require allocation of additional resources to implement these contracting improvements.

The Executive does not believe that creation of a Small Works Roster will reduce the issuing of change orders for work unrelated to the original contract because departments would still have to meet all the other requirements of State law for public works contracts except advertising the contract in a newspaper. In response, because most jurisdictions have a Small Works Roster for construction contracts, the auditor continues to recommend that the Executive contact other jurisdictions to evaluate more thoroughly the benefits this option may provide the City.

Chapter One: Introduction

Purpose

The City of Seattle expects to spend almost \$1.9 billion² in the next five years (1997-2002) on capital improvement projects that will repair, improve and expand City-owned facilities.³ The City will spend most of the \$1.9 billion through architectural and engineering (A&E) and construction service contracts. We anticipate that contract amendments and change orders, as in the past, will represent a significant proportion of these expenditures. Currently, expenditures for A&E contract amendments often equal or exceed the original contract values, and change orders for construction contracts generally range between 10-25% of the original contract values.⁴

Given the monetary significance of contractual amendments and change orders, we initiated this review to evaluate the City-wide and department-specific practices at Seattle City Light (SCL), Seattle Public Utilities (SPU), and the Department of Parks and Recreation (Parks)⁵ for issuing and controlling the costs of contract amendments and change orders. In particular, we sought to determine whether these three departments

- adhered to relevant City and State laws and regulations; and,
- used appropriate contract controls and procedures to safeguard City resources.

Scope and Methodology

In performing this audit, our consultant

- reviewed relevant federal, City and State laws and regulations, as well as City-wide and departmental written policies and procedures;

² approximately \$1.4 billion for rate-funded utilities, and \$0.5 billion for other City departments

³ RCW 39.04.01 0 defines public works to include “all work, construction, alteration, repair or improvement other than ordinary maintenance, executed at the cost of the city.”

⁴ For the contracts we reviewed, construction change orders averaged 15.4 percents of the initial contract costs and A&E contract amendments averaged 362.2 percent of the initial contract cost.

⁵ We chose to include the two utilities for this study because they represent almost two-thirds of current and anticipated spending for capital improvements. We added Parks to the study to include one general-fund department. Together, the three departments represent almost three-quarters of current and anticipated spending for capital improvement contracts.

- interviewed 61 City staff with contracting responsibilities, including project managers, engineers, architects, administrators, department managers and inspectors; and
- examined and analyzed documentation on file for a judgmental sample of 74 contracts with contract amendments/change orders from three City of Seattle departments (SCL, SPU, and Parks).

In selecting the contracts to include in our sample (Figures 1 and 2), we considered the dollar size of the original contract and the dollar amount of subsequent amendments or change orders. All of the contracts in our sample were active at some point between January 1994 and December 1996. Our audit did not attempt to determine the need for the services, which the City obtained through these contracts.

Figure 1: A&E Contracts Sample

	Original Value	Value of Amendments	Total
Contracts With Amendments	\$ 11,853,794	\$ 53,686,809	\$ 65,540,603
Contracts Without Amendments	2,967,850		2,967,850
Total	\$ 14,821,644	\$ 53,686,809	\$ 68,508,453

Figure 2: Construction Contracts Sample

	Contract Value	Change Orders	Total
Incompleted Construction Contracts (21 contracts)	\$ 43,582,880	\$ 3,082,279	\$ 46,665,159
Completed Construction Contracts (14 contracts)	23,257,648	7,239,013	30,496,661
Total	\$ 66,840,528	\$ 10,321,292	\$ 77,161,820

The 74 contracts we reviewed represented over \$145 million in expenditures. The 39 A&E contracts in our sample⁶ represented nearly \$68.5 million in total spending, of which \$53.6 million (roughly 78 percent) came through their 91 contract amendments.⁷ The 35 construction contracts in our sample totaled nearly \$77.2 million to date, of which over \$10.3 million (roughly 13 percent) came through change orders. These construction contracts ranged in size between roughly \$135,000 and \$10 million. The contractor had not yet completed the construction work for 21 of these construction contracts. For the 14 completed construction contracts in our sample, change orders represented about 24 percent of total contract expenditures.

Our review of A&E contract amendments included an examination of the original consultant selection process to determine whether the additional work:

- was within the original scope of the request for consultant proposal;
- resulted from an emergency condition; or
- called for a competitive selection process rather than contract amendment.

Because neither State law nor City policies clearly delineate when additional work crosses the line beyond the original scope of services, we had to exercise some subjective judgment in making this determination. For six of the 39 A&E contracts, we also

⁶ All active.

⁷ That is, per A&E contract the total contract amendments averaged 362.2 percent of the initial contract cost.

examined a judgmental sample of consultant invoices to determine whether consultants billed and the City paid in accordance with contract terms.

We evaluated construction change orders against industry standards for complete and consistent documentation, independent estimates, and full evaluation of proposed costs and rates.

This work was performed in accordance with the *Institute of Internal Auditors Standards*.

Because the scope of this audit was to examine and make recommendations regarding the City's contract administrative practices; we included no other entities associated with these contracts within the scope of this audit. The findings and recommendations of this audit neither criticize nor endorse the actions or inaction of any entity other than the City.

Background

In the City of Seattle, Seattle City Light (SCL) and the new Seattle Public Utilities (SPU) are responsible for the majority of capital improvement expenditures, with the remainder coming principally from such departments as the Department of Transportation (SeaTran) and the Department of Parks and Recreation (Parks). SPU, which the City formed in January 1997, combines the Water Department and three divisions from the Engineering Department--Drainage and Waste Water, Solid Waste, and Engineering Services.⁸ In addition, SPU has taken over responsibility for administering SeaTran's A&E contracts and construction contracts, and SCL's construction contracts. Most capital improvement projects involve two distinct phases: project design and project construction.

Project Design Contracts

SPU, SCL, and Parks generally contract with A&E consultants for project design services. Contracting for these services as needed is more economical than maintaining sufficient in-house design personnel with the range of skills and expertise required to meet the demands of a fluctuating and varying A&E workload. Other local governments typically follow the same practice. Parks mainly hires architects. SPU and SCL mainly hire engineers.

In contrast with most purchasing and construction contracts, which base selection on lowest and best bid, State law mandates that the City contract with the A&E firm it determines to be "most highly qualified to provide the services required." The City may not consider the price or cost of the services in making this determination. Once it determines the most qualified firm, however, the City may negotiate a contract for design

⁸ The Transportation Division became the new Seattle Transportation Department.

services at a price it deems fair and reasonable. If it cannot negotiate a satisfactory contract, the City may formally terminate negotiations with the first firm and begin negotiations with the second most qualified firm. The City may continue the process until it reaches a contractual agreement or terminates the search. Under emergency conditions, the City may declare that an emergency exists and hire A&E services directly without going through the normal procedures.

SPU, SCL and Parks use three types of contracts to compensate A&E consultants:

- Firm Fixed Price (Lump Sum): The City pays a predetermined price and fee not subject to adjustment on the basis of the consultant's actual costs. Parks generally uses this type of contract for the architectural services it typically procures.
- Cost Plus Fixed-Fee: The City reimburses the consultant's actual costs (within limitations) and pays a negotiated fee independent of the actual costs. SPU and SCL generally use this type of contract for the engineering services they typically procure.
- Time and Materials: The City pays a set hourly rate for the consultant's actual hours. The rate includes the consultant's wages, overhead, and profit. The City reimburses the consultant's actual non-labor costs. This type of contract is periodically utilized for both A&E services and construction.

SPU, SCL, and Parks amend the majority of their A&E service contracts as design proceeds because it is difficult to determine precisely how design will evolve during the initial study or even during the preliminary design phase. Often, City departments plan for contract amendments from the very beginning of a project, and all public agencies commonly use contract amendments to incorporate additional design work as a project progresses. This is appropriate as long as the additional design work is consistent with the original project scope of services. Negotiating fair and reasonable prices for multiple amendments, in a manner that protects public resources, is the most difficult part of A&E contracting.

Project Construction Contracts

The City generally contracts for most capital improvement construction projects on the basis of the lowest competitive bid it receives from a qualified contractor. Washington State law requires local governments to contract out most of their construction projects⁹ and to use competitive bids for all larger construction projects.¹⁰ The City may bypass the competitive bidding requirements during emergency situations or when the desired product is subject to a natural monopoly.

⁹ State law restricts City employees from performing an amount of work greater than 10 percent of its public works construction budget.

¹⁰ Larger public works projects include any project over \$25,000 involving a single craft or trade and any project over \$50,000 involving more than a single craft or trade.

The City amends the majority of its construction contracts through change orders. Change orders result from unforeseen or changed conditions, added or deleted scope, or design errors or omissions. Because changes in work are a normal part of the construction process, the contract terms and conditions generally anticipate such changes. Industry standards and City contracting regulations allow the City to set the payment amount by one of four methods:

- unit prices contained in the formal bid;
- unit prices mutually agreed upon;
- mutual acceptance of a lump sum price; and
- time and materials.

A change order is only appropriate to change project construction in a manner consistent with the initial bid specifications. The permissibility of any change order will depend on the particular facts and circumstances giving rise to the change order. Although the distinction between permissible and inappropriate change orders is somewhat inexact, permissible change orders generally meet the following criteria:

- the modified job will consist essentially of the same work in the same locations as the parties bargained for initially;
- the project, as ultimately constructed, will be essentially the same as the parties contracted to construct; and
- the ordered change will not alter the very nature of the project.

Chapter Two: Management of A&E Consultant Contracts Needs Improvement

The City needs to upgrade its management of A&E consultant contract amendments since current processes limit the City's ability to ensure that the amounts it pays for these services are fair and reasonable. Specifically, the City needs to:

- 1) define scope of services and estimate costs prior to requesting consultant's proposed price;
- 2) document evaluations of consultant proposals and contract negotiations;
- 3) review support for proposed direct and indirect rates;
- 4) negotiate fixed fees and document rationale;
- 5) review invoices against contract terms and conditions;
- 6) prevent the mislabeling of non-engineering work as engineering work; and
- 7) use competitive selection rather than contract amendment for new design services.

All but the last of the findings probably apply to original A&E contracts as well as amendments, but we examined the original contracts only to the extent necessary to perform our review of contract amendments. According to ESD, often the majority of expenditures for an A&E contract are related to contract amendments rather than original contracts, and in many instances the City has planned for the amendments from the beginning of a project.

Defining Scope of Services and Estimating Costs Prior to Requesting Consultant's Proposed Price

For none of the 91 contract amendments¹¹ associated with the 39 A&E design-service contracts in our sample did the contracting City department establish and document a detailed estimate prior to requesting the consultant's price proposal. For two of the 91 amendments, the files even contained memorandums stating the contracting department would develop a budget after the consultant submitted a cost proposal. Effective cost management, however, dictates that a procuring agency¹² prepare an independent cost estimate, reflecting a clearly defined scope of services, as the first step in ensuring it contracts only for necessary services and obtains a fair and reasonable price. This practice works to ensure the contract provides only the work the City department desires and provides an independent measure of the reasonableness of the contractor's price

¹¹ Sometimes departments refer to additions to Consultant contracts as amendments and sometimes as supplements. In this report, we always use the term amendments.

¹² Independent estimates are mandatory for many government agencies including the Federal government.

proposal. Independent estimates are mandatory in most other governments, including the federal, Washington State, and King County governments. City procedures, however, do not require independent cost estimates, and in the majority of cases, the consultant, rather than the procuring department, actually develops the scope of services the contract amendment is to provide.

Audit Recommendation:

City departments procuring additional design services under an A&E contract should clearly define the scope of additional services and develop an independent cost estimate prior to requesting a price proposal from its consultant.

Executive Response and Action Plan

ESD, in conjunction with other departments, will develop and adopt additions to the General Rules for Consultant Contracting that will require departments to document their initial cost estimates for services and to define, to the extent possible, the scope of services sought. The rules will establish specific criteria and dollar thresholds for implementation of this recommendation. Development of more detailed independent cost estimates and scopes of work by departments prior to soliciting price proposals will require additional resources. The Executive concurs that it is advantageous to the City's interests to ensure, prior to requesting a cost or price proposal, that departments have a clearly defined scope of work for the services sought and an independent estimate of the costs. While departments do generally define the services sought, there are times when, due to the nature of the project, the City requests the expertise of a consultant to help refine and define exactly what is needed to resolve a particular situation. In addition, while departments have a general estimate of the price that a particular service is likely to cost (based on experience and rough budget estimates), they do not generally keep detailed records demonstrating their estimates.

Documenting Evaluations of Consultant Proposals and Contract Negotiations

For all 91 contract amendments associated with the 39 A&E contracts in our sample, we found no evidence 1) documenting that the contracting City department had evaluated the consultant's price proposals or 2) summarizing the cost negotiations. Most of the project managers we interviewed stated that they do review consultant proposals, and, if the costs appear unreasonable, request another proposal. However, project managers could not provide any evidence to substantiate this. They said they retain and file only the final, accepted, proposal. Conducting and documenting technical and financial evaluations of consultant proposals, however, are critical in establishing a fair and reasonable contract price and are mandatory for many government agencies, including those of the federal government. These evaluations generally include a reconciliation of the procuring department's own independent cost estimate to the consultant proposal and an evaluation of labor hours, subconsultant costs, other direct costs, indirect costs, and profit or fee. The evaluation becomes the agency's initial negotiation position. Along with this evaluation, contract files should also contain a written summary documenting how the contract negotiations resolved any differences between the consultant's price proposal and the procuring department's evaluation. By not documenting evaluations of consultant price proposals and subsequent price negotiations, City agencies cannot provide adequate substantiation that consultant compensation is fair and reasonable. Also, the documentation is important as a source when there are questions of what was agreed-upon.

Audit Recommendation:

The City should develop procedures for procuring departments to follow in documenting their evaluation of contractor price proposals and summarizing price negotiations. In addition, the City needs to provide project managers with training in technical and cost evaluation.

Executive Response and Action Plan

ESD, in conjunction with other departments, will develop and adopt additions to the General Rules for Consultant Contracting that will require departments to document evaluation of contractor cost or price proposals and summarize price negotiations. The Executive concurs that this documentation should be maintained as a means of demonstrating the process by which prices are developed.

Reviewing Support for Proposed Direct and Indirect Rates

Although 28 of the 39 A&E contracts¹³ in our sample¹⁴ based reimbursement wholly or partly on rates for direct labor,¹⁵ fringe benefits,¹⁶ and overhead,¹⁷ ¹⁸ the City is not collecting and reviewing data to support proposed rates for direct and indirect costs. For these 28 contracts:

- five of the contracts, the State Department of Transportation sent the City a report on contractor's direct and indirect rates.
- two of the contracts, the procuring City department obtained accounting data; but, the department failed to review the data adequately, allowing unallowable¹⁹ costs in the provisional rate calculations (for example, federal income tax, state tax in excess of rates, charges for expenses included in overhead, and contingencies).
- twenty-one of the contracts, the City had no data to support the proposed rates.

By not obtaining and carefully evaluating the necessary accounting data to set provisional rates, the City could be paying more for design services than what is fair and reasonable.

The overpayments would be less serious if the fringe benefit and overhead rates were truly, rather than theoretically, provisional rates -- estimates based upon currently available accounting information, subject to adjustment as actual rate data becomes available. Contract specifications call for the consultant to submit actual rates at the end of each year and to reimburse the City for any overpayments. Also, within three years after making final payment to the consultant, the City has the right to determine the actual allowable rates the consultant incurred -- either through an audit or from audit data, which the consultant or another government agency provides and the City accepts. If the actual rates show that the City overpaid the consultant during the life of the contract or contract amendment, the consultant has to immediately refund to the City any excess. In actuality, however, we found no evidence that contractors are making year-end downward adjustments or that City departments are reviewing charges to obtain reimbursement of overpayments to contractors. In addition, even if the consultant repays

¹³ The remaining 11 A&E contracts in our sample were firm fixed price (lump sum) contracts.

¹⁴ These 28 contracts represented 83 of the 91 A&E contract amendments in our sample.

¹⁵ Base salary costs (actual hourly rate of pay for each person) for the time personnel are directly performing work necessary to fulfill the terms of the contract amendment.

¹⁶ Costs associated with employees above and beyond salaries (for example, for reasonable sick leave, vacation and holiday pay, unemployment compensation insurance, FICA, retirement contributions, medical insurance) -- generally reimbursed as a percentage of base salary costs.

¹⁷ Costs that cannot be allocated to specific contracts -- generally reimbursed as a percentage of base salary costs.

¹⁸ The City based reimbursement for 20 of these 28 contracts on costs plus fixed fee; for the other eight, on time and materials.

¹⁹ According to the Federal Acquisition Regulation.

overpayments, the consultant would not have to pay interest on the overpayments and, in essence, would enjoy an interest-free loan from the City until the City determines the actual rates and seeks repayment (sometimes three years or more).

Audit Recommendation:

The City should request support information for proposed direct and indirect rates, including: reports of indirect-rate audits performed by federal or State government agencies; detailed breakdown of indirect rates cross-referenced to consultant firm's financial statements; accounting system support detail for misc. direct costs (for example, computer services, copying, travel) to ensure that the consultant charges the costs directly to the clients who benefit and does not include them in calculating the overhead rate; and certified payrolls.

Executive Response and Action Plan

ESD, in conjunction with other departments, will develop and adopt additions to the General Rules for Consultant Contracting that will require departments to evaluate direct and indirect rates for consultant contracts and amendments above a specified dollar threshold that is to be established. Resources may be needed by departments. The Executive concurs that departments should carefully evaluate proposed direct and indirect rates both prior to contract award and at the end of contracts for any necessary adjustments in payments made.

Negotiating Fixed Fees and Documenting Rationale

SPU, SCL, and Parks appear to be accepting consultant fixed-fee proposals without careful review and analysis and without documenting the rationale for such acceptance. Under cost reimbursement contracts, the consultant receives a negotiated fixed fee based on estimated costs. For all 28 A&E contracts in our sample which provided for fixed fees,²⁰ the procuring department simply agreed to the fixed fees the consultant proposed, without documenting the rationale for this acceptance. The fixed-fee portion of the compensation the department paid for these contracts ranged between 12 percent to 16 percent of estimated costs. If departments do not carefully examine, analyze and then aggressively negotiate the fixed-fee component of consultant compensation, the department almost certainly will overpay for consultant services. In addition, by not documenting the factors they considered in negotiating the fixed fee percentage, departments face great difficulties in substantiating that they negotiated fair and reasonable contract prices. In documenting that fixed fees are fair and reasonable, one would normally expect the procuring department to show that they reflect current market rates -- what other large municipalities are paying for similar expertise and project size.

Audit Recommendation:

The City should document the negotiation of fixed fees with consultants and include in the documentation a comparison with current fixed fee percentages which other large municipal agencies are negotiating.

Executive Response and Action Plan

ESD, in conjunction with departments, will develop and adopt additions to the General Rules for Consultant Contracting that will require departments to maintain documentation of negotiation of fixed fees with consultants.

Resources may be needed by departments. The Executive concurs that departments should document the negotiation of fixed fees with consultants. Because fixed fee percentages may vary based on the risk factors involved with the contract and be different for other large municipal agencies depending on their size and location, departments will, where appropriate and warranted by the size of the proposed contract or amendment, obtain data from other agencies for comparison purposes.

²⁰ 20 cost-plus-fixed-fee, 8 time and materials (with profit included as a percentage of the set hourly rate for the consultant's actual hours); the remaining 11 A&E contracts in our sample were firm fixed price (lump sum) types.

Reviewing Invoices against Contract Terms and Conditions

City departments do not regularly review contractor invoices against the terms and conditions of A&E contracts to determine the appropriateness of contractor charges. We closely examined contractor invoices for six of the 39 A&E contracts and found that overpayments and unsupported charges represented almost one-third of the City's total payments. On four of the six, we found overpayments for rates that contractors billed in excess of the rates the contracts allowed. On five of the six, we found unsupported charges, including charges by subconsultants the contract or amendment did not recognize, direct expense charges without the supporting documentation the contract required, and charges the contractor invoiced without an executed contract. Figure 3 provides additional details by contract.

Figure 3 - Payment Administration Accuracy

Contract	Amount Reviewed	Over Payment	Unsupported Charges
1	\$ 94,791	\$ 1,455	\$ 48,146
2	312,814	-	10,890
3	106,521	-	106,521
4	102,581	414	-
5	194,460	77	56,261
6	137,059	3,829	77,582
Total	\$ 948,226	\$ 5,775	\$ 299,400

By failing to regularly review invoice charges against contract terms, the City is paying more for design services than it originally established in the contract as fair and reasonable.

Audit Recommendation:

City departments should ensure their invoice-review process includes a comparison of consultant charges with contract payment provisions. The project manager's approval for payment should certify completion of this comparison.

Executive Response and Action Plan

ESD, in conjunction with departments, will develop and adopt additions to the General Rules for Consultant Contracting that will require departments to review invoices against contract terms prior to payment. Resources may be needed by departments. The Executive concurs that all invoices should be reviewed by departments to ensure they are consistent with the terms of the contract.

Taking Care Not To Label Non-Engineering Work As Engineering Work

Contract cost management is less time consuming, and generally more effective, when cost is one of the evaluation factors in the consultant selection stage of contracting. The proposed fee for services becomes terms for payment to the selected consultant. Cost cannot be an evaluation factor in selecting an engineering consultant, this makes the cost management task more difficult and more necessary. In four of the 39 A&E contracts we reviewed, we found City agencies had labeled certain types of work as engineering when the work should not have been labeled as such. The work was not specific to engineers and could have been performed by firms or individual consultants who were not engineers. By classifying these services as engineering, the City is making the contract cost management more difficult than regulations require.

Audit Recommendation:

The City and Departments should disallow the use of engineering services for non-engineering work and ensure that it does not happen. The City should better delineate what services RCW 39.80 governs as engineering services. If the services a City department is seeking to purchase are not truly engineering services under RCW 39.80, the department should specify cost as an evaluation factor in selecting a contractor, document it in the source-selection file, and include it in the final contract.

Executive Response and Action Plan

Departments, with assistance from ESD, will further train and educate their project managers on the differences between architectural/engineering work governed by RCW 39.80 and non-architectural/engineering work. As a guide, departments will utilize ESD's General Rules for Consultant Contracting, which explain the distinction between the two.

Department's Should Use Competitive Selection Rather Than Contract Amendment for New Design Services

Two of the three departments we reviewed have amended A&E contracts to incorporate additional design work clearly beyond the original scope of services -- a violation of good public policy.²¹

- One department had amended four of its eight contracts in our sample to include work clearly outside the original scope and intent of the contract; one amendment even included construction work.
- Another department had several contracts in our sample which had amendments that clearly went beyond the intent of the original contract award. However, the Department was in the process of closing out these old contracts and developing internal policies to limit amendments to the intent of the original project.²²

When additional work deviates so substantially from the original scope of services as to constitute new design services, City departments must initiate a competitive consultant selection process or, for smaller scale design work, use the City's roster of approved consultants. Open competition and fair and equal access to contracting opportunities are fundamental in hiring design consultants. When the City issues amendments outside of the original scope or intent of the contract, the most qualified firm may not end up performing the work and, thus, the City may not receive the best value for its money.

²¹ All six amendments the Department of Parks and Recreation issued for its ten contracts in our sample were for scope changes related to the original contract intent. This is an appropriate use of amendments.

²² We noted that the Water Utility had been destroying documentation which supported its selection of contractors. The State's Public Disclosure Act requires the City to retain this documentation. The supervisor of contract administration for the newly formed Seattle Public Utilities had stopped this inappropriate practice prior to the start of our audit.

Audit Recommendation:

The City should institute an independent process for approving contract amendments above a certain dollar amount (perhaps \$250,000), to include review of original source selection documentation.

Executive Response and Action Plan

ESD, in conjunction with other departments, will add policy guidelines, criteria, and dollar thresholds to its General Rules for Consultant Contracting generally defining what constitutes acceptable versus unacceptable amendments as they relate to the original scope of work of a project. In the event a department determines it is in the City's best interests to amend a contract outside of the standards established by ESD for acceptable amendments, the department shall complete and file a statement with OMP, the City Auditor, and ESD documenting the reasons for the change, in a form to be determined by ESD.

Chapter Three: City Has Little Centralized Oversight or Coordination of A&E Contracts

The City's oversight of consultant contract compensation and its coordination of consultant contract rates are inadequate. The City's General Rules for Consultant Contracting do not include guidance on setting contract compensation and controlling contract costs, nor do departments have a means of coordinating information on contractor rates. The Department of Executive Services (ESD), which publishes the City's General Rules for Consultant Contracting, provides almost no other oversight and guidance to departments in managing consultant contract costs. This lack of oversight and guidance results both from ESD's limited staffing and from its view of the role the City has asked it to play in regard to contracts.

Need for City-wide Guidance for Managing Contract Costs

The City's General Rules for Consultant Contracting do not provide procedures or guidelines for negotiating fair and reasonable contract compensation and controlling contract costs. In fact, the payment section in its sample contracts is left blank for City agencies to negotiate individually. In addition, the General Rules for Consulting Contracting²³ do not require contracts costing \$250,000 or more to provide information to any outside entity justifying contract compensation. The lack of City-wide guidelines makes the cost management process more difficult and subject it to interpretation of individual employees, who differ in their training, skills, and work habits. During our interviews with City employees with contracting responsibilities, the employees frequently requested guidance in managing the cost of consultant contracts, especially in independently estimating contract costs, performing technical and cost evaluations of consultant proposals, evaluating proposed direct and indirect rates, negotiating costs, and administering payments.

The contracting units within SPU and SCL are aware of the need to improve contract cost management and are currently working with department management to determine what kind of assistance or training they may require and to develop improved policies and procedures. Written Citywide guidance is needed to assist in these efforts.

²³ Section 6.50

Audit Recommendation:

Prepare City-wide guidance on negotiating fair and reasonable compensation and controlling contract costs. This guidance should include the preparation of independent cost estimates, the evaluation of contractor price proposals, including rates and fees, the negotiation of compensation terms, and the review of contractor invoices.

Executive Response and Action Plan

ESD will develop, in conjunction with other departments, additions to its General Rules for Consultant Contracting that will require the preparation of independent cost estimates, the evaluation of contractor cost or price proposals, including rates and fees, the negotiating of compensation terms, and the review of consultant invoices. ESD resources will be needed. The Executive concurs that there should be standard payment and compensation contract language that should be made available to departments for the different types of payment models. ESD will request that the Law Department draft such contract payment language for review by City departments and adoption by ESD as part of its General Rules for Consultant Contracting. Consistent with the Executive's approach to addressing other recommendations of the audit, ESD will develop clearly defined rules, train departments, and perform selective audits of departmental contracts to ensure compliance with the established rules.

Inter-Departmental Sharing of Information on Contractor Rates

Because the indirect rates which City departments negotiate with contractors are not readily available in a centralized location, some City agencies pay the same consultant higher indirect rates than others -- in spite of the fact that contract terms require the agencies to base the rate on the consultant's actual rate. Figure 4 displays indirect rate differences for ten contract amendments we examined.

Figure 4 - Disparity in Indirect Rates Between City Agencies

	City Light	Water	Engineering	Solid Waste	Drainage
Consultant A		173.30%	193.00%		
Consultant B	180.00%	170.00%			
Consultant C		174.00%	165.00%	168.00%	
Consultant D	196.70%	189.22%			192.62%

The cost of the higher rates some departments negotiate is significant. For example, if Water and Solid Waste negotiated a rate of 165% for Consultant C's share of three active contracts, it would have saved \$67,073 over the life of the contract amendments.

Audit Recommendation:

A central City function should obtain and file information, data, and analysis related to contract negotiations in a central location or publish it for all City agencies to use.

Executive Response and Action Plan

The Executive concurs that a centralized listing of indirect rates negotiated by different departments would be a valuable tool for all departments to use in negotiating rates. While ESD would be the logical agency to collect, maintain, and disseminate such data, ESD would need additional staff resources to administer this new program.

Chapter Four: Improving Administration of Construction Contract Change Orders

Several significant weaknesses exist in the City's administering of change orders for construction contracts. Departments often inadequately document the pricing of change orders, particularly larger scale ones. Lack of any Citywide definition of contractor overhead increases the likelihood of overpayment. Lack of formal Pre-award Surveys to eliminate unqualified contractors from the competitive selection process makes cost control over change orders more difficult. Finally, departments are issuing change orders for work unrelated to the original contracts, generally because the City has not yet established a small works roster of construction firms.

Documenting Change Order Pricing

Documentation of change order pricing was incomplete and inconsistent for five of the 35 contracts we examined. These five contracts represented nearly \$4.7 million in estimated costs and accounted for a total of 265 change orders, or 45 percent of the change orders we examined. Generally, the contract files failed to document one or more of the following items needed to verify that the City paid a fair and reasonable price:

- the method of compensation (lump sum, unit price, or time and materials),
- a detailed contractor proposal,
- an independent cost estimate,
- an evaluation of the contractor proposal, and
- a record of the price negotiation.

The supporting documentation for the change orders we examined varied with the preferences and training of the inspector, engineer, or outside construction manager. For small change orders (under \$10,000), an analysis of the costs and benefits of full documentation may lead to acceptance of rather informal documentation. However, for larger change orders, lack of complete and consistent documentation makes it impossible for department management, legislative oversight, or auditors to understand how the procuring department determined fair and reasonable compensation. In such a situation, it is difficult, if not impossible, to establish adequate accountability for public funds.

Citywide guidance on construction management presently does not specify the documentation requirements for change orders. Generally, large municipalities have detailed procedures manuals for construction management that describe how to document and administer change orders.

Audit Recommendation:

City departments issuing construction change orders should maintain file documentation which demonstrates that the compensation is fair and reasonable. ESD should provide specific City-wide guidance in this regard, after reviewing and drawing from King County's procedures. The City's documentation standards should apply to any consultants which departments use for construction management.

Executive Response and Action Plan

ESD will conduct appropriate research on the procedures employed by other government agencies and will issue guidelines for departments. ESD resources will be needed. Departments will establish clear procedures to ensure that they retain compensation documentation in their files, rather than purging the information, as is the current practice.

Defining Contractor Overhead

City departments are allowing and paying as direct costs items that are generally defined as contractor overhead for capital improvement projects. For example, in our review of change orders, we found instances in which departments treated the following contractor expenses as direct costs: power, supervision, project management, trailers, telephone, small tools, disposal tools, environmental safety, miscellaneous materials, and clerical. If the contractor's overhead rate also includes these items, the City will pay more for change orders than appropriate. The danger of this happening is real because project managers must negotiate the content for overhead without the benefit of actual costs, historical costs or any audit of the contractor's bid estimates. An overhead rate that appears reasonable by industry standards may actually be overstated because items appropriate to overhead are being charged as direct costs. The problem is due in part to inadequacies in the City's standard construction contract. Although specification of overhead items is the norm in construction-industry contracts, the City's standard construction contract does not specify what costs are appropriate as contractor overhead rather than as direct costs.

Audit Recommendation:

ESD should clarify the City's standard construction contract by clearly defining contractor overhead in its payment section. In developing this definition, the Department should explore the definitions used by other governments in King County.

Executive Response and Action Plan

ESD, in conjunction with departments, will conduct appropriate research to develop a contractor overhead definition for bid specifications. Resources will be needed by ESD.

Performing Formal Pre-Award Surveys

Other jurisdictions perform formal pre-award surveys to disqualify contractors who do not have the resources to complete large capital improvement projects on schedule and as specified. Pre-award surveys do not award contracts based on qualifications. What they do is disqualify contractors who do not have resources or skills to complete the work. Several of the project managers we interviewed stated that they could do a better job of overall cost control if they screened bidders rather than automatically awarding the contract to the lowest bidder. Though ESD distributed a pre-award survey for departments to use, departments are not currently using it.

Audit Recommendation:

The City should consider requiring the State of Washington's procedures for performing pre-award surveys.

Executive Response and Action Plan

ESD will add to its Request to Award Public Works Contract form questions to City departments about whether they have requested and evaluated a Pre-Award Bidder Information Statement from contractors new to doing business with the City. ESD will seek assistance from the Law Department in determining when the City can find a low bidder not to be a responsible bidder. The Executive has reviewed the standard public works contract language regarding submission of pre-award information by the contractor and believes that it provides sufficient tools for City departments to utilize in evaluating the qualifications of contractors. It states: "The Owner will evaluate all Bids to determine the lowest and best Bidder. This evaluation may include investigations to establish the responsibility, qualifications and financial ability of the Bidder to do the Work pursuant to the Contract Documents. A Bidder whose Bid is under consideration for Award shall, upon request, promptly submit satisfactory evidence of qualifications, financial resources, construction experience and organization available for the performance of the proposed Work. Documented information shall be submitted within 7 days after receipt of a written request from the Engineer."

Eliminating Change Orders Unrelated to the Original Contract

Although its standard construction contract specifies that change orders must be within the scope of the original contract, the City routinely issues change orders that are not within the scope of the original contract. Figure 5 displays 12 such change orders we encountered during the audit.

Figure 5 - Out of Scope Change Orders²⁴
(C/O = Change Order)

C/O Project	C/O Value	Mark-Up
Road Paving	\$ 398,797	
Queen Anne Decorative Crosswalk	35,876	
Old City Light Bldg. Underground Tank Removal	12,871	1,197
S. Fork Nooksack Road Abandonment	58,302	5,830
Sandpoint CC Parking Lot Paving	4,000	343
DAS Fiber Optic Project	58,000	
Closed Circuit Television System	38,477	4,527
Mt. Spokane Underground Communication Conduit	4,567	425
DAS Fiber Optic Project	46,174	
Demolition of Old Center	183,550	20,632
Hazardous Material Remediation	110,282	11,796
Sign at MLK Park	11,909	2,573
Totals	\$ 962,805	\$ 47,323

For nine of the twelve change orders the general contractor did not perform the work. Instead, the general contractor subcontracted the work at the City's direction. The work for six of the twelve change orders occurred outside of the physical boundaries of the original project (for example, Bellingham rather than Downtown Seattle, Queen Anne Hill rather than Northwest 85th, Spokane rather than Downtown Seattle). The mark-up²⁵ column is the amount the City paid to the general contractor above and beyond the cost of the work. This amount represents the amount the City may have saved by assigning the work directly to the subcontractors, if it had a mechanism for doing so. It does not include any additional money that the City might have saved by competitively bidding the work. By adding unrelated work to active contracts, the City may be paying more than it should for small construction projects. In addition, issuing a change order

²⁴ The change orders over \$100,000 are not candidates for the Small Works Roster, but would be good contracts for small businesses.

²⁵ Only eight of the nine mark-up amounts were documented in the file.

unrelated to the original contract may cause the City to miss an opportunity to contract directly with small firms operated by women and minorities.

Various project managers and construction management personnel told us that change orders unrelated to the original contract were generally the result of a lack of time and personnel to manage a competitive bidding. Usually the changes did not meet the "Emergency Public Works Contracting Rules," which would allow contracting without public competitive bidding, but the department did not have the time and personnel to develop adequate drawings and to advertise for competitive bids.

Many of the inappropriate change orders may have been avoided if the City's uses a Small Works Roster for construction projects. A Small Works Rosters identifies contractors and expedite the contracting process by allowing departments to obtain telephone or written quotes from these contractors without formal advertising. The City's lack of a small works roster for smaller scale construction is doubly surprising in light of the practice of other nearby local governments and in light of its own practice in regard to A&E contracts. Under the provisions of State law,²⁶ most local governments in Washington State have already developed small works rosters for construction projects under \$100,000. We contacted nine jurisdictions in King County, and King County, and found that they all had a small works roster program in place. The small works roster allows the city to award contracts (without formal bidding) provided, that proposals are invited from at least five contractors on the roster (at least one of which shall be a qualified minority or woman contractor).

²⁶ RCW 39.04.155

Audit Recommendation:

Departments should discontinue the use of change orders unrelated to the original contract. The City should establish a Small Works Roster for construction projects under \$100,000 as provided for under RCW 39.04.155.

Executive Response and Action Plan

ESD, in conjunction with departments, will adopt policy guidelines generally defining what constitutes acceptable versus unacceptable change orders as they relate to the original scope of work of a project. In the event a department determines it is in the City's best interest to amend a contract outside of the standards established by ESD for acceptable change orders, the department shall complete and file a statement with OMP, the City Auditor, and ESD documenting the reasons for the change, in a form to be determined by ESD. ***The Executive does not believe that creation of a Small Works Roster will resolve the issues cited in the audit.*** Operation of a Small Works Roster still requires writing bidding documents, the bid process itself, bonding, and all the other requirements of State law for public works contracts. Advertising in a newspaper is the only step eliminated with the use of a Small Works Roster.

Audit Response:

Since most jurisdictions have a Small Works Roster for construction contracts and the small works roster allows the city to award contracts (without formal bidding), we continue to recommend that the Executive contact other jurisdictions to evaluate more thoroughly the benefits this option may provide the City.